

English translation of the amended sheets of
International Preliminary Examination Report

CLAIMS

1. Actuation device comprising at least two
motors (15, 16) placed side by side on the same part
5 (4), without prolonging each other in a long principal
direction, motor shafts (17, 18) along the same
direction starting from the motors and in the long
principal direction of the motors, at least two pulleys
(12, 13) at least essentially coaxial and actuated by
10 the motors, in which the pulleys (12, 13) are offset
along the motor shafts and in that the motor shafts
have portions that engage (24, 25) on the pulleys that
are also offset.

2. Device according to claim 1,
15 characterised in that the pulleys are perfectly
coaxial, and the motor shaft portions that engage on
the pulleys form bulges on the shafts.

3. Device according to claim 2,
characterised in that the motor shafts are supported by
20 a reinforcement (19) fixed to the part (4), that
comprises a pair of bearings (20, 21) aligned with the
motor shafts and supporting their free ends.

4. Articulated arm comprising a base (3), a
train of segments (4, 5, 6) and links (9, 10) between
25 the segments and the base, and corresponding link
actuation devices, two of the said actuation devices
(15, 16) including motors fixed side by side on a
segment (4) without prolonging each other in a long
principal direction, motor shafts (17, 18) along the
30 same direction starting from the motors and in the long
principal direction of the motors, at least essentially

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coaxial pulleys (12, 13), and mechanical transmissions joining the pulleys to the links (9, 10) actuated by the said two actuation devices, in which the motor shafts are supported by a reinforcement (19) fixed to
5 the segment (4), the pulleys (12, 13) are offset along the motor shafts, and the motor shafts have portions (24, 25) that engage on the pulleys that are also offset.

5. Articulated arm according to claim 4,
10 characterised in that the pulleys are perfectly coaxial, motor shaft portions that engage on the pulleys forms bulges on the motor shafts, and the reinforcement comprises a pair of bearings (20, 21), aligned with the motor shafts, supporting the motor
15 shaft free ends.